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Citation for published version:

Laing, M & Lass, R 2005, 'Early middle English knight: (Pseudo)metathesis and lexical specificity', *Neuphilologische Mitteilungen*, vol. 106, no. 4, pp. 405-423. <<http://www.helsinki.fi/jarj/ufy/publications.htm>>

Link:

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Document Version:

Publisher's PDF, also known as Version of record

Published In:

Neuphilologische Mitteilungen

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EARLY MIDDLE ENGLISH KNIGHT: (PSEUDO)METATHESIS AND LEXICAL SPECIFICITY¹

He was a verray parfit gentil *kinght. Chaucer *Canterbury Tales*, General Prologue.

... many, if not all, sound changes diffuse gradually through the lexicon affecting some words before others... If a change is both phonetically gradual and lexically gradual — that is, if words change gradually, and if each word changes at its own rate, then each word will encompass its own range of variation (Bybee 2001: 40-41).

1. Introduction

The head entry for KNIGHT in MED includes, beside the more usual spellings of the type *cniht*, *knizt*, the following forms: *kinight*, *kinnizt*, *kiniht*, *keneit*, *chenict* and *cinht*, *kinct*, *kincht*, *chinch*t, *kinnte*, *kingh*; also the plural forms: *cinthene*, *chenicte*, *chenicta* and *cinhten*. In the quotations following the head entry there appear *kincte*, *kyntte*-, *keneyt*, *kynnyzt*, *kyngh*, *cinhtene*, *cinhtes*.² Under the head entry for LERNING-KNIGHT appear also *leornikenehtes* and *lornigkinhtes*. The manuscript dates for these citations range from the early 12th to the late 15th century. Those that appear in early Middle English texts (ca. 1150–1325) first came to our attention during the compilation of the corpus of tagged texts for A Linguistic Atlas of Early Middle English (LAEME)³. The LAEME corpus contains some further examples not noted either in MED or in the editions of the texts in which we found them.

The reason why some of these spellings have not so far been noticed is related to palaeographical ambiguities in some medieval scripts and hands. The litteral sequence ‘in/ni’⁴ is realised in Middle English scripts as three minim strokes. The

¹ We thank the Arts and Humanities Research Council for supporting the work of the Institute for Historical Dialectology and the Faculty of Humanities, University of Cape Town for generous travel support. We thank the British Academy for a Visiting Professorship for Roger Lass enabling collaboration on this paper. We are grateful to Keith Williamson and Derek Britton for suggestions on an early draft. We are also grateful to Michael Benskin for useful discussion during the genesis of this paper, and for extensive and very valuable further comments.

² It is apparent that the head entry forms have been normalised, with ‘i’ substituted for ‘y’ wherever it occurs in the quotations. This makes it look as if there are rather more different examples of ‘kin-/cin-’ type spellings than in fact there are. In the following discussion we cite the forms as they appear in the manuscripts, not the normalised versions.

³ Laing and Lass in preparation.

⁴ Here, as elsewhere, we adopt, for the most part, the convention established by Michael Benskin (1997: 91 fn. 1 and 2001: 194 fn. 4). *Litterae*, independently of any manuscript rendering, are enclosed in single inverted commas. The *figurae* of particular manuscripts are enclosed in angle brackets. Citations from manuscript are in italics. Abbreviations are expanded into the *litterae* to which they correspond, and printed in Roman. Italics are also used for citation of ‘dictionary forms’, from Old English and elsewhere, and for starred

minim forms the letter ‘i’, is doubled to create ‘u’ and ‘n’ and tripled to form ‘m’. The types of script that are used as book hands in the late 12th and early 13th century are developments of English protogothic minuscule (with or without influence from contemporary documentary scripts);⁵ from the early 13th century onwards, Textura (or Textualis); and from the mid-13th century, early versions of Anglicana.⁶ Textura scripts are formal book hands. Anglicana was first developed as a cursive script (Parkes 1969: xiv–xvi), but during the fourteenth century a more formal version, Anglicana formata, was developed (Parkes 1969: xvi–xvii). Depending on the formality of the script, a minim may or may not have an approach stroke and a final off-stroke (see Figure 1).

Protogothic minuscule **i m n u**

Textura or Textualis

1. Prescissa **i m n u**

2. Quadrata **i m n u**

3. Semiquadrata **i m n u**

4. Rotunda **i m n u**

Early Anglicana

1. Formata **i m n u**

2. Currens **i m n u**

Figure 1

<i>, <m>, <n> and <u> in idealised versions of some scripts used for early Middle English.

Scribes sometimes offer clues other than context to differentiate the three-minim sequences ‘in’, ‘iu’, ‘m’, ‘ni’, ‘ui’. Approach and off-strokes may be customised to link minims near the top or at the foot so as to distinguish ‘n’ from ‘u’, as in modern typeface or careful handwriting. The conventions of the *script* may prescribe such differentiation, but individual *hands* do not always succeed in maintaining it. In other words, some scribes may link the minims of ‘n’ near the top and at the bottom and use no linking strokes in ‘u’, and sometimes write variants that could be either letter. Judgements as to whether a scribe ‘meant’ ‘n’ or ‘u’ in any given case must often, therefore, take into account his practice over long stretches of writing. That a single minim is to be read as ‘i’, may be indicated by an oblique stroke above,

etymologies. *Potestates* are represented by IPA symbols in square brackets. Glosses and word-identities are in small capitals.

⁵ For description of these terms see Brown (1990); cf. also Wright (1960).

⁶ For description and exemplification see Brown (1990) and Parkes (1969) and the examples in Figure 1.

corresponding to the modern dot. The convention is by no means universal in Middle English hands, nor need it be used regularly even by those scribes who do adopt it. In some hands it is therefore very difficult to tell whether a scribe ‘meant’ ‘in’ or ‘ni’.

When a word has a historically expected spelling, if the relevant scribal sequence of *figurae* appears superficially to match it, the reader or editor is likely to ‘see’ the expected sequence. However, the spellings that we listed at the beginning of this paper indicate that in KNIGHT the ‘expected’ sequences ‘cni-/kni-’ were sometimes perceived to have been replaced by ‘cin-/kin-’ and unequivocally so; we consider that a number of other examples should be admitted to the canon. The frequency of these spellings and their distribution through time and space suggest strongly that they are not ‘scribal errors’.⁷ The way is therefore open to the claim that they display phonological as well as graphic metathesis. The forms showing epenthesis, e.g. *kini-* etc., may form a necessary groundwork for the existence of the metathetic ones. See §3 below.

2. Palaeography and Distribution

The *cin-/kin-* spellings cited in MED include four from the G version⁸ of *Ancrene Riwe*, four from Laȝamon’s *Brut*, (Laȝamon A, hand B),⁹ and one from the Lambeth Homilies.¹⁰ The spellings in the G version of *Ancrene Riwe*, and the form *lornigkinchtes* in Lambeth Homilies, can be read only as containing the sequence

⁷ Some scholars, of course, assume that all change begins with error of one kind or another: ‘sound changes result from misinterpretation’ (Blevins and Garrett 1998:550). We consider that there is a distinction between advertent and inadvertent divergences from a pre-existing norm: variation is not synonymous with error.

⁸ Cambridge, Gonville and Caius 234/120 (mid 13th c.), pp. 1–185. Edition: Wilson (1954). The sample in the LAEME corpus is pp. 1–59. The two ‘kin-’ type spellings on p. 23 represent the only examples of the word KNIGHT in the LAEME sample from this text. The forms on pp. 69 and 70 were gleaned from the entries in MED, and verified from the microfilm of the manuscript. The script is a book hand with cursive tendencies and some Anglicana letter shapes, notably long ‘r’ and 8-shaped ‘g’.

⁹ London, British Library, Cotton Caligula A.ix (late 13th c.) Note that the source of the *cinht(-)* spellings in MED must be Madden’s (1847) edition. The more recent edition for EETS by Brook and Leslie (1963, 1978) prints only *cniht(-)*, without comment. Scribe B’s contributions run from fols. 17va lines 1–4, 18vb line 7–26vb (foot), 27ra line 6–87vb (foot), 89rb line 4–194v (end). The LAEME sample is fols. 17va, 18vb–35va, excluding the six lines by Scribe A on fol. 27ra. For relative frequencies of *cin-* vs. *cni-* see p. 6 below. The script is a very variable form of Textura semi-quadrata.

¹⁰ London, Lambeth Palace Library 487 (ca. 1200). Note that the epenthetic spelling *leornikenehtes* (fol. 1av) also appears in the Lambeth Homilies. Edition: Morris (1867–68). The LAEME corpus includes the whole text of the Lambeth Homilies, divided into two language types. Language 1 has only two examples of KNIGHT: one *-cnihtes* and one *-kenehtes*. Language 2 has only one example of KNIGHT: *-kinchtes*. The script is Protogothic book hand.

‘in’, because the scribe in each case has marked the first minim of the three as ‘i’ with a clear oblique stroke (see Figure 2, nos. 1(a-d) and 2).¹¹

1. Cambridge, Gonville and Caius 234/120, *Ancrene Riwe*

a) p. 23

chinchte

b) p. 23

kincht

c) p. 70

cinhtes

d) p. 69

kinht

2. London, Lambeth Palace Library 487, Lambeth Homilies

fol. 55v

lornigkinhtes

Figure 2

Examples of ‘cin-/kin-’ spellings for KNIGHT from the G version of *Ancrene Riwe* and from Lambeth Homilies. Not to scale. 1 (a) *chinchte*, 1 (b) *kincht*, 1 (c) *cinhtes*, 1 (d) *kinht*; 2 *lornigkinhtes*. The motivation for superscript <s> here is unclear. The word is not line final.

The G scribe tends to link minims in the middle rather than at the foot of the stroke, rendering his use of oblique strokes to identify ‘i’ all the more necessary. No. 1(d) is especially interesting because there is a sequence of four minims between <k> and <h> (the first two linked, the second two not), and the editor has read this spelling as *kiniht* (whence the citation in MED). But the fourth minim is in fact subpuncted for removal, a scribal correction, and the reading should therefore be *kinht*.

¹¹ The word-shapes in Figures 2–6 are traced from microfilm copies of the original manuscripts. The sizes of the traced words depend on the magnification used in the making of the microfilm; they do not necessarily match their sizes in the original. The oblique strokes appearing in Figure 2 are unusually strong, and the tracing here is accurate in the impression it gives of their breadth and heaviness. In the other figures, it has not been possible to replicate the fineness of the hairlines in some of the hands. The oblique strokes therefore may appear heavier here than they are in the manuscript. However, it is the presence, position and direction of the stroke that are at issue here, and this is what we have tried to indicate. There are no visual phenomena in any of these tracings not agreed by both of us to be present in the microfilm copies that we used.

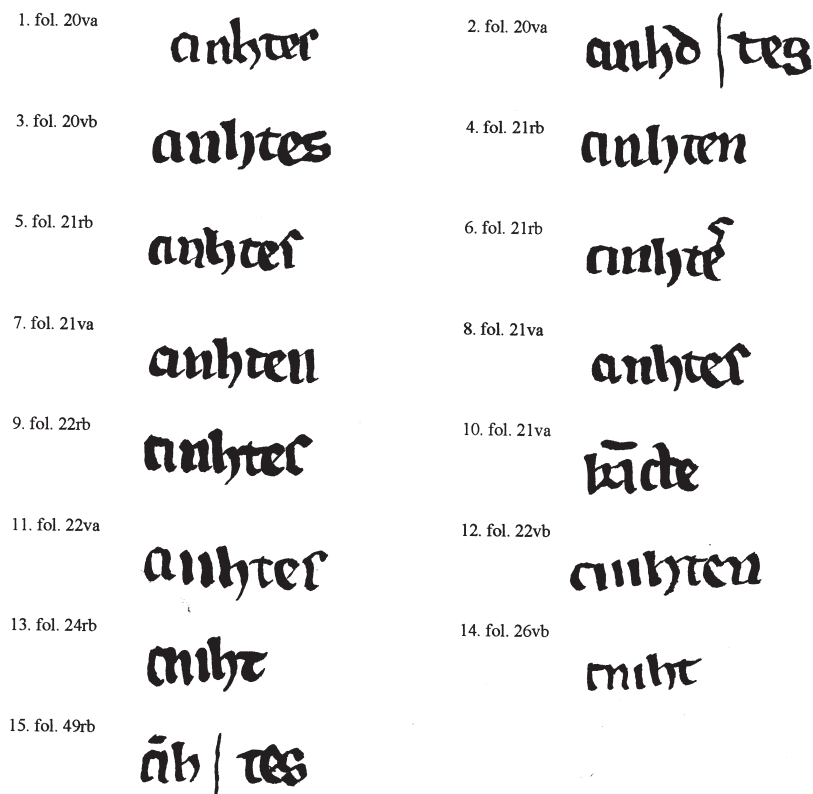


Figure 3

Examples of spellings for KNIGHT in British Library, Cotton Caligula A.ix, Lazamon A, Hand B. Note that in nos. 2 and 15 the word is split by the line end, shown by a vertical line. 1, 3, 5, 8, 9 *cinhtes*; 2 *cinhd/tes*; 4, 7 *cinhten*; 6 *cinhtē*; 10 *kincte*; 11, 12 ambiguous *cinht-/cniht-*; 13, 14 *cniht*; 15 *cinh/tes*. Use of superscript <s> in no. 6 may be because the word is line final.

Figure 3 nos. 1–15 show a sequence of versions of the word KNIGHT from Lazamon A, Scribe B. Scribe B forms his <c> with a curved body and a horizontal head stroke from which any following minim is always drawn directly down. Whether or not the pen was lifted between the two strokes, the head stroke of the <c> and the following minim always appear joined. Scribe B tends not to use an oblique stroke to distinguish ‘i’; the reading of any following minims therefore depends on their relationship to the one joined to the initial <c>. He has three distinct strategies for the minim cluster in the word KNIGHT. In the first he clearly separates the second minim from the first and joins the second to the third (see Figure 3 nos. 1–9). In

the second he joins the first and second minims and separates the third (see nos. 13 and 14). The nine examples of the ‘cin-’ type occur in a cluster from the beginning of Scribe B’s first stint¹². The third strategy is illustrated by no. 10. A horizontal bar or tilde over a word or part of a word is the commonest mark of abbreviation in the writing of medieval Latin. In Latin it represents many and diverse letter sequences, interpretable according to context. In the English of the period the tilde is much more restricted in its use. In early Middle English it is usually confined to indicating ‘n’ or ‘m’ and it is normally placed over the vowel *preceding* the nasal. The normal expansion of no. 10 is therefore *kincte*, which is how both Madden and Brook & Leslie interpret it.¹³ The last unambiguous ‘cin-’ type appears on fol. 22rb. Thereafter Scribe B writes two forms that could be read ‘cin-’ or ‘cni-’ (see nos. 11 and 12) before he begins to write unambiguous ‘cni-’ types (nos. 13 and 14).

The sample from Scribe B’s output in the LAEME corpus runs from the beginning of his contribution to fol. 35v column a (fols. 17va lines 1–4; 18vb line 7–26vb (foot); 27ra line 6–35va). Within this sample, KNIGHT appears 48 times with <cni-> and 10 times with <cin->. We have searched the rest of the text visually for examples of the word KNIGHT, from fol. 35vb to the end of the manuscript (fol. 194v — discounting the short contributions by Scribe A on fol. 27ra lines 1–6, and fols. 88ra–89rb line 3). We found 638 examples of which 633 were clearly of the ‘cni-’ type seen in figure 3 nos. 13 or 14. Three were ambiguous, like nos. 11 and 12, one (15) was an abbreviated version broken by the line end. One other we discount because its second minim was originally written mistakenly as <r>. The fact that the *cin-* forms cluster near the beginning of Scribe B’s contribution and that he subsequently produced over 600 unequivocal *cni-* forms suggest that the *cin-* forms were deliberate, whether they were initiated by Scribe B himself, or transmitted from his exemplar.

¹² See fols. 20va (x2), 20vb, 21rb (3x), 21va (2x), 22rb; one ‘cni-’ type spelling appears on each of fols. 21ra, 21rb, 22rb. Madden (1847) reads the first two of these as ‘cin-’ types.

¹³ Cf., however, the spelling *ikāpen* KNOWN in Lambeth Homilies fol. 26v, which implies the contraction of *ikanpen* not *iknapen*. Morris (perhaps reasonably) expands it instead *iknawen*, with ‘n’ in its expected place (and <w> for manuscript *wynn*). There is, however, another possible interpretation: see §5 below.



Figure 4

Examples of <kin-> spellings for KNIGHT from *Havelok*. 1, 3 *kinth*; 2, 4, 5 *kinctes*; 6, 7, 9, 10 *kinth*; 8 *kinthes*. <k> is separated from the rest of the word in no. 4 because it is line initial.

The other *cin-/kin-* spellings cited in MED do not fall into the early Middle English period and do not appear in the LAEME corpus. But the corpus adds more examples to the set. In his edition of *Havelok*,¹⁴ Smithers (1987:3) notes for line 77 the manuscript reading *kincth*, which he emends to *knict*. All 61 of the remaining instances of KNIGHT he prints with *kni-*; he admits no other instances of scribal <kin-> in KNIGHT. We, however, consider that ten of the 62 instances of KNIGHT in the poem are written <kin-> (see Figure 4, nos. 1-10). Figure 4 no. 1 is a tracing from microfilm of the word that Smithers recognised and emended. Like no. 1, nos. 2 and 10 have clear oblique strokes marking the first minim as 'i'. Nos. 3-9 have no distinguishing oblique strokes, but in each case the first minim is separate whereas the second and third are clearly linked near the top.¹⁵ Without the evidence of nos. 1, 2 and 10 it might be easier to dismiss nos. 3-9 as 'carelessly formed' <kni->. But given that the examples with the oblique stroke are unequivocal, there is no reason not to interpret those without the stroke according to their minim junctures.

¹⁴ Oxford, Bodleian Library, Laud Misc 108, fols. 204ra-219va (ca. 1300). The LAEME corpus includes the whole text. The script is Textura semiquadrata.

¹⁵ Note that Figure 4 no. 4 is the first word of the line, which accounts for the separation of the initial <k> from the rest of the word. Line initials are written between ruled margins to the left of the text column and are touched with red as *litterae notabiliores*.

1. fol. 240vb

kinzt

2. fol. 241ra

kinzt

3. fol. 241ra

kinzt

Figure 5

Examples of *kinzt* for KNIGHT from the Cotton version of *The Owl and the Nightingale*.

One of the best known and most edited of early Middle English texts is *The Owl and the Nightingale*.¹⁶ The Cotton version has a cluster of three examples of *kinzt* on fols. 240vb–241ra, which, as far as we know, have never been noted. The scribe (Scribe C) habitually uses an oblique hairline stroke as a long extension of the mid-stroke of <e>. He sometimes uses a similar stroke to decorate the limb of <r>. He also occasionally uses an oblique stroke to mark <i>. Whether marked in this way or not, Scribe C's <i> is usually separate from neighbouring letters at the top and joined to the following letter at the foot (his <u> is formed as <i> + <i>). His <n> is different, its two minims normally being clearly joined near the top as well as at the foot. Figure 5, nos. 1–3 illustrate the *kinzt* examples we have found.¹⁷

fol. 35r

cinht

Figure 6

An example of <cin-> in KNIGHT from the C version of *Ancrene Riwle*.

¹⁶ London, British Library, Cotton Caligula A.ix, fols. 233r–246r (late 13th c.). The script is Textura semiquadrata. For major editions see the references in the most recent — Cartlidge (2001). The LAEME corpus includes the whole text, divided into two language types. In language 1, three out of four instances of KNIGHT are of the 'kin-' type. Language 2 has only one example of KNIGHT (fol. 244va), and it is written with all three minim strokes linked at the foot, not at the top, suggesting the readings *ciuht* or *cuiht* rather than *cniht* or *cinht*.

¹⁷ Note that no. 1 appears to show a serif drawn out from the head of the <i> itself, which is a style of '<i>-dotting' associated with some Textura scripts (see Brown 1990, pls. 28 and 29) and which Scribe C does very occasionally employ on <i> instead of his more usual detached stroke. The detached oblique stroke (cf. Brown 1990, pl. 30) seems here to have been employed in addition. A more flamboyant version appears on no. 2, while in no. 3 the attached serif seems to have been begun and then perhaps aborted.

We offer one final possible example of a ‘cin-’ type spelling, which occurs in the Cleopatra version of *Ancrene Riwe*:¹⁸ see Figure 6. There appears to be a clear oblique stroke on the first minim. When he uses such distinguishing strokes, the scribe of Cleopatra varies between joining them to the top of <i>, as here, and making them detached. There also appears on microfilm to be a faint stroke above the third minim, which is not attached to the minim but seems to join the approach stroke of the ascender of following <h>. It is very faint and we have not attempted to reproduce it.

Five of the texts showing *kin-/cin-* in KNIGHT belong in the South-West Midlands. The scribal dialects of the Lambeth Homilies, the G version of *Ancrene Riwe*, the Cotton version of *The Owl and the Nightingale*, and Lazamon’s *Brut* all seem to belong to N. Worcs. That of the C version of *Ancrene Riwe* belongs nearby in N. Herefords. The remaining text is from the other side of the country: the language of the *Havelok* copyist has been localised in W Norfolk (McIntosh 1976: 36–49).¹⁹ There are only two ‘kin-/cin-’ type spellings cited in MED not covered above in our LAEME examples. The first is *kynght* from *Sir Degrevant*, in the late 15th-century manuscript Cambridge University Library Ff.I.6, which has associations with Findern in Derbys. According to *LALME*, the language of all three hands contributing to the text is consonant with an origin in that county. The second is the placename *kynttecote* (1275) cited from the Worcestershire volume of the English Place Name Society. Kristensson (2002: 169) lists *le Kynght* and *le Kynyght* both personal names recorded for 1327 from Somerset.²⁰ There are also some medieval Hiberno-English examples; among them are six from *The Pride of Life*: *kyntis* (three times), *kynyit* (once), *kintis* (once).²¹

¹⁸ London, British Library, Cotton Cleopatra C.vi (second quarter 13th c.), fols. 4r–194r: edition: Dobson (1972). The LAEME sample is fols. 4r–48r. There are two examples of KNIGHT in the sample, one *knichte*, the other the example in Figure 6. The script is Protogothic book hand with some cursive tendencies and elements of contemporary document hand.

¹⁹ Quoted in Smithers (1987: lxxxix).

²⁰ No other OE *cn-* words in his data show metathesis or epenthesis. Note that a number of the examples cited here are spelled with <y> rather than <i> as the nuclear vowel. This makes misinterpretation of the usual three-minim sequence a non-issue. Merja Stenroos (personal communication) also tells us that *kyn-* spellings occur in British Library, Harley 201’s version of *Robert of Gloucester*, hand B, fols. 52 ff. From her analysis of two tranches of Hand B’s output (fols. 52–71, and 125–134) she notes that the scribe only adopts the *kyn-* spellings in the first tranche (*kyntz* 7x, *kyntz* 1x, *kyntzys* 7x, *kyntzes* 11x and *kyntzes* 1x) and has only *knyzt*(-) 11x in the second tranche. Presumably there was a change (perhaps exemplar-conditioned) in his text between her two tranches of analysis.

²¹ The manuscript containing the text, which was written ‘probably in the first half of the fifteenth century’ (Davis 1970: lxxv) was destroyed by fire in 1922. The relevant forms are in the ‘current hand’: *kyntis* (lines 33, 56, 135), *kynyit* (line 355). See Davis (1970: 91 fn. 2, 84 fn. 4 and 101 fn. 3). *kintis* appears in line 154; this is Brandl’s reading — Davis has *knitis*. We owe these references to Michael Benskin, who also supplies from his medieval Hiberno-English corpus: (1) Trinity College Dublin 592, fol. 11r, *Conquest of Ireland* (late 15th or early 16th century) *kynght* (once); (2) Huntington Library, HM 129, fol. 133r, *Northern Homily Collection* (?early 15th century) *kynght* (once). He also points

3. *Metathesis and Epenthesis*

The word KNIGHT seems to have no cognates outwith West Germanic.²² It does, however, appear in all branches of the subfamily with the same cluster of senses: BOY, SERVANT (as in modern German *Knecht*), as well as the feudal and chivalric connotations familiar from later English. Characteristic forms are: OE *cniht*, *cneoh*t; OFris *knecht*, *kniucht*; OS *-knecht*; MDu *knecht*; OHG, MHG *kneht*. Despite this narrow provenance, the evidence is unambiguous for the original shape of the word: common WGmc would have had the root form **knext-*. The *communis opinio* is that the postvocalic segment was a palatal in Old English and in the other languages. It may well have been palatal, since it follows a front vowel, but it need not have been: many modern Germanic languages do not palatalise historically back fricatives after front vowels. We will therefore use the symbol [x] for this segment with the interpretation ‘non-anterior high tongue-body fricative’, with no commitment to the location of the maximal constriction.

The forms illustrated in Part 2 above would therefore appear at first sight to be the results of metathesis. There is, however, an alternative story involving epenthesis and stress shift, which we will discuss below. We distinguish in this paper between two kinds of metathesis and epenthesis: ‘structural’ and ‘sporadic’. Many languages have structural morphophonological processes, which often serve to maintain canonical syllable structures in polymorphemic strings. Examples of both can be found in the inflectional systems of some East Cushitic languages. In Sidamo, for instance, a vowel is epenthised between a consonant final stem and a consonant initial suffix. If the stem ends in a single obstruent and the suffix begins in /n/, the obstruent and nasal are metathesised (Hudson 1995: 783; for many more examples see Blevins and Garrett 1998). A simpler and less exotic example can be seen in the English regular sibilant and dental suffixes, where an epenthetic vowel appears in noun plurals and genitives, and weak verbal past tenses and past participles, to break up what would otherwise be illegal clusters (dog[z] vs fish[ɪz], call[d] vs hunt[ɪd]). Of course the segments in question are historically retentions of original vowels. But in Modern English they appear in all and only the environments where their non-appearance would produce phonotactically illegal clusters (like **[tɪd]*); hence from a synchronic (functional) point of view they are epenthetic just like the other examples cited. History and synchrony are not the

out (personal communication) that these instances could depend on Irish speech habits, in which metathesis and epenthesis are well recorded. See Benskin (1997: 134–135) on late 15th-century texts from Killeen, and the references there cited to O’Rahilly (1932).

²² It was, however, apparently borrowed into NGmc. Grimm and Grimm (1873) s.v. *Knecht* note Dan. *knegt* and Sw. *kneckt*. We have been unable to locate the Danish form in any dictionaries available to us, but the Swedish one is given s.v. *knekt* in *OOSS* with a first appearance in 1526. Michael Benskin has also drawn our attention to three Norwegian forms (Guttu et al.: 1982): *knekt* BRAZEN (YOUNG) MAN (from MLG); *landsknekt*, 15th to 17th century (MERCENARY) SOLDIER; *knekt* JACK/KNAVE (in cards) [MB’s translations from Norwegian glosses].

same, and this is a simple example of the widespread phenomenon usually called 'rule inversion'.

We are concerned here with the other, 'sporadic' kind, normally characterised in the standard historical texts as one of the 'minor changes' (cf. Williams 1962: §115 on metathesis, §105 on epenthesis (anaptyxis) in the history of Portuguese). These changes are uncommon and lexically bound, never 'neogrammarian'. In addition to metathesis and epenthesis the usual list includes dissimilation and haplology (so Bloomfield 1933: 390–91). Bloomfield says (391): 'Changes like these are very different from those which are covered by the assumption of [neogrammarian] sound change; it is possible that they are akin rather to ... analogic change and borrowing'.²³ The relative rarity of these changes then suggests an 'inherent' sporadicity: they do not appear to be the initial stages of later-aborted lexical diffusions, but lexeme-bound *ab initio*, with no sign of a likely future extension.²⁴

The surface appearance of the forms we have cited so far indicates metathesis; the question is what kind? Are we dealing with simple reordering of adjacent segments or could the process be more complex? Given an apparent historical movement from a sequence C_1C_2V to a sequence C_1VC_2 , historical evidence from many languages suggests that there are two possible modes of transition. One is simple metathesis, in which the vowel moves to the left over the second consonant (referred to in Windross 1988 as left-shift). The other, which we will call pseudo-metathesis (cf. Blevins and Garrett 1998), involves no actual movement of segments, but is triggered by vowel epenthesis. Schematically, a pseudo-metathesis arises by the insertion of an epenthetic vowel, the process being $C_1C_2^1V$ via $C_1VC_2^1V$ and $C_1^1VC_2V$ to $C_1^1VC_2$ with transfer of accent to the epenthetic vowel and loss of the original accented one.²⁵

Such a process has been claimed to be the underlying mechanism that gives us the modern forms *bright*, *fright* and *wright* (Brunner 1965: §166; cf. Hogg 1992: §7.95). These words originally had the stressed vowel before the [r]. The commonest OE spellings are of the types *beorht*, *fyrht* and *wyrhta*. However, metathetic forms also appear, mainly in late Northumbrian:²⁶ e.g. *breht*, *froht* AFRAID and *wriht* MAKER.

²³ Cf. Pope (1934: §142), who defines metathesis and other 'sudden' and sporadic changes as '*sound substitutions* and not *sound changes*' (italics original).

²⁴ These 'minor' change types have to some extent been argued away in Hoenigswald (1964 [1978]). They are taken there either as special instances of neogrammarian change operating in rare environments, or as 'dialect borrowing' (with the source dialect either unattested or unidentified). We will see later that rarity of environment type is highly likely to be a factor in the change discussed here, but there is no evidence supporting dialect borrowing. From a post-1970s perspective (after, e.g., Chen 1972), Hoenigswald's attempt to save neogrammarian *Ausnahmslosigkeit* is no longer necessary, since it is generally accepted that at least some changes proceed by lexical diffusion, and that diffusion can be aborted at any point in the unfolding of a change.

²⁵ For detailed discussion of metathesis-by-epenthesis, see Blevins and Garrett (1998: §2.5).

²⁶ Though they also occur in Ru.¹ (Mercian) and some West Saxon texts.

These could be taken as cases of simple metathesis²⁷ were it not for the existence in the Lindisfarne Gospels of forms that show clear epenthesis: e.g. *geberehtnad* BRIGHTENED, *fyrhto* FRIGHT and *forohtade* FRIGHTENED.

The metathesis-by-epenthesis story is classically invoked in the history of English only for cases involving [r] and a following [xt]-cluster. Since [n] is also a sonorant, we should consider the possibility that the same narrative could apply to KNIGHT, especially if there are any tokens showing epenthesis. The epenthetic spelling *leornikenehtes* (see fn. 10 above) appears in the Lambeth Homilies beside the metathetic spelling shown in Figure 2. MED also lists *chenict*, *chenicte*, *chenicta* from the *Liber Winton* (1110), *Robertus le keneyt* from a Bedfordshire Subsidy List (1310), *kynyght* from *Sir Degrevant* (cf. *kyngh* above) in a 15th-century manuscript with Derbys connections, and *kynnyzt* from the early 15th-century Stonyhurst College manuscript of *Medulla Grammatica* (no language localisation available). This suggests that epenthetic spellings, though not common, occurred sporadically across the country. We therefore propose that the history of the ‘kin-/cin-’ type was as follows: [kn'ixt] > kin'ixt > k'inixt > k'inxt].²⁸ In the attested epenthetic spellings, the nuclear vowel is <i>/<y> or <e>/<e(y)>. The spelling <e> represents the etymologically original vowel. The spellings <i>/<y> represent raisings, via ‘palatal umlaut’ or one or other of the OE changes that raised mid vowels before high consonants. The <ey> spelling may represent the same diphthongisation that occurs in spellings of the type <feīȝt> for FIGHT from OE *feohtan* (arising in Middle English from forms in [-ext-]), with subsequent loss of the following fricative (Lass 1994: §10.3). With the exception of *chenict*(-), the spellings of the epenthetic and nuclear vowels are the same in the examples above. This suggests either the epenthesis of a ‘neutral’ vowel which later harmonised with the original,

²⁷ So Campbell (1959: §459 (3) and fn. 2).

²⁸ The preceding representation raises a number of problems. The first is merely notational: given what we think we know about Middle English phonotactics, a nasal preceding an obstruent would have to be homorganic. The interesting question is the nature of the obstruent itself. Would it have remained a fricative or might it have become a stop? The sequence [ŋxt] probably existed in early Germanic, but in a restricted environment: mainly the past tenses and participles of certain nasal final weak verbs, e.g. *[bran̥xte] BROUGHT. In this case the nasal was lost in pre-historic times with compensatory lengthening in English, and the fricative retained variably into the 17th century. Here, where the nasal is retained, the apparent restriction of [ŋxt] to early Germanic might argue for an adjustment to the more ‘natural’ sequence [ŋkt] in Middle English; but this is purely conjectural. It might also be argued that the <kinht> type spellings in fact represent the [k'inixt] stage with the final cluster still containing a vocalic element. In this context, Michael Benskin (personal communication) has drawn our attention to educated Ulster [fɪlɒm] or [fɪlɒ], [ɛlɒm] or [ɛlɒ], for FILM, ELM, spellings notwithstanding. The form corrected to *kinht* from *kiniht* in the G version of *Ancrene Riwe*, illustrated in Figure 2 and discussed in §2 suggests, however, that at least some speakers did not retain the epenthetic vowel.

or a process of insertion that was harmonic from the beginning.²⁹ The *chenict*-spellings may represent a preharmonic stage.³⁰

4. *Why the word KNIGHT?*

As far as we can determine, there are only four lexemes recorded in Middle English that show apparent *knV* > *kVn* metathesis. MED lists s.v. *knīl* n. the single spelling *kynl*,³¹ and s.v. *knāve* n. 2 (b) *kanue*.³² We find these spellings difficult to interpret, but assume that they must in fact represent disyllabic pronunciations for two different reasons: *kynl* because on any reasonable sonority hierarchy, liquids are more vowel like than nasals; *kanue* because the sequence *[kanv] would be phonotactically illegal in Middle English or in any other Germanic language.³³ There is, however, one other word that could, like KNIGHT, show genuine metathesis. MED lists s.v. *knicche* n. the forms *kencches*³⁴ and *kynch*.³⁵ This word derives from OE (*ge*)*cnycc* BOND, TIE. The Middle English forms have the senses BUNDLE, BUNCH, SHEAF. We have also found an apparent modern reflex of this metathetic form. EDD lists the form *kunk* s.v. *kunk*, sb., recorded from Shetland (1900) and glossed ‘measure or quantity of carded wool, ready for spinning’. No etymology is hazarded, but it seems likely that this represents the same lexeme as *knuck* sb. 2 glossed ‘in spinning, a small quantity of wool’ and also recorded from Shetland (1897–99). For

²⁹ We have found one OHG epenthetic spelling, *chenēht*, cited in Doornkaat Koolman (1882) s.v. *knecht*. Unfortunately, no further provenance is given and we have not been able to locate forms of this kind in the standard OHG or MHG dictionaries. At the point of writing, the relevant fascicle of the Berlin *Althochdeutsches Wörterbuch* was not available. Informal examination of some modern languages with initial [kn] clusters showed various patterns. Some varieties of Dutch and German released the [k] directly into the nasal, while others showed either a syllabic nasal or an epenthetic ‘schwa’-type vowel. A similar vowel (high mid central unrounded) was observed in a number of Cape Town Afrikaans speakers and one north-eastern Scots speaker. We have not done a large-scale field project that would give us enough data to tell us whether the kind of full-vowel epenthesis we are positing for Middle English occurs in any modern Germanic languages in stop + nasal clusters.

³⁰ We know of a few other epenthetic spellings of a harmonic type. In the LAEME corpus, *keneleden* KNELT appears in Oxford, Bodleian Library, Digby 86, fol. 126vb in *The Sayings of St Bernard* (late 13th c., N. Gloucs). MED has s.v. *knāpe* n. the placename *Canappewelle* (Cmb. 1286), s.v. *knē* n. the placename *keneya* (NRY 1225), and s.v. *knouen* v. 3b ‘?a1475(a1396) *Hilton SP 1. 51.34b *konowe*’ and 10a (a) ‘a1500(?a1400) *SLChrist* 5655 *kenewe*’. In the Linguistic Atlas of Older Scots corpus the spelling *kanaulage* KNOWLEDGE is found in a document of 1466 from Angus (we are grateful to Keith Williamson for this reference). Cf. also *kanave*’s KNAVE’S (Aberdeen, 1888) in SND s.v. *fang* n. 2.

³¹ In ?Audelay *An a byrchen bonke* 220/81 (dated a.1450).

³² Cited under the entry for PPI. A (1) (Vrn [‘Vernon MS’]) (ca. 1390) as a variant from another manuscript, unspecified.

³³ This form could be saved by assuming retention of the final weak vowel, i.e. [kanve], since [nv] would be acceptable if the two segments were heterosyllabic as in ANVIL, CANVAS, etc.

³⁴ From Walter of Bibbesworth’s *Glossary*: 328, a1325.

³⁵ From *Mayer Nominale* 718/22: a1500.

this, EDD gives the etymology MLG *knucke*, ‘ein zusammengedrehtes Gebündel Flachs &c’.³⁶ Whether the history of these forms involved epenthesis or not is undecidable on the basis of the historical record. Our argument below, however, will suggest that it was not unlikely.

Since we have established the reasonableness of [n]’s participation in metathetic and pseudo-metathetic narratives, a question now arises: why should particularly these two [kn-] words, KNIGHT and KNITCH, show metathetic forms? The answer is structural. These appear to be the only such words in the attested Middle English lexicon that have a front nuclear vowel, and end in a high tongue body consonant. This suggests a slightly different take on the notion ‘minor change’ that we broached in §3 above. The sporadicity of these changes may depend less on inherent properties of the process types themselves than on what they have to work with. For instance, Hoenigswald (1964 [1978]: 169) points out that there are only three words in Italic and Celtic that show the change $*p...k^w > k^w...k^w$ (e.g. Latin *quinque* < $*penk^we$). However, there seem to be only three roots in the IE lexicon with the requisite shape. The change in fact is classically, if trivially, neogrammarian, since it exhausts its potential environment. Our two-word change looks at first like an example of the same thing.³⁷

However, the case of KNIGHT and KNITCH is different in one respect: it is not token exhaustive. We have no information on KNITCH in the LAEME corpus — it appears never to have been a high frequency word at any stage in the history of written English. KNIGHT, however, turns up very frequently indeed in written Middle English. It is accepted by many modern linguists that high text frequency is a good predictor of vulnerability to change. (For thorough discussion with reference to modern corpora, see Bybee 2001.) Frequency cannot be calculated in a comparable way in the LAEME corpus, because so much of its content depends on contingencies of survival and on text type. Nevertheless, the corpus has 380 tokens of KNIGHT in the 40 text languages in which the word appears; only 27 in six text languages are of the ‘cin-/kin-’ type. These forms are therefore a small subset of the spellings for KNIGHT appearing in the LAEME corpus. In contrast to the ultimately neogrammarian Italo-Celtic change cited above, this one appears to represent a short-lived variation pattern within the early Middle English scribal

³⁶ Holthausen (1934) s.v. *cnycc* gives the same MLG form as cognate, but does not suggest any suffix that might have caused *i*-umlaut in Old English. Cf. also OED s.v. *Knitch*, ‘from same root as LG. *knuck(e)*, Ger. *knocke*, a bundle of heckled flax’. Neither Holthausen nor OED finds any ulterior etymology.

³⁷ An even more striking instance of ‘exhaustion’ has been suggested to us by Michael Benskin (personal communication). The word *cuid* SHARE is apparently the only example in recorded Irish that shows labiovelar umlaut of PIE $*e$. The ancestral form is of the unique shape $*k^weCi$. Labiovelar umlaut (spelled <ui>) depends on the previous raising of $*e$, which depends on the presence of a following $*i$. For further discussion, see Schrijver (1999).

systems. One other factor may account in part for the rarity of this change. The set of potential inputs in the broadest sense (i.e. all words beginning with ‘cn-/kn-’) is small: the LAEME corpus lemmatises only 18 roots beginning with this sequence; MED has a total of 31, which is a very small proportion of the lexis of a language as relatively well-attested as Middle English. Even in a Germanic perspective, initial *kn- is relatively uncommon: Holthausen (1934) lists only 27 distinct lexical roots with this initial for Old English. Cleasby and Vigfusson (1874) list only 32 for Old Icelandic.³⁸

5. Other outcomes?

What other possible outcomes are there in the development of [kn-]? In most modern dialects of English the outcome has been reduction to [n] via a development including at least the stages [tn] and [hn] (Lass 1999: §3.5.4).³⁹ In some, however, e.g. in the North East of Scotland, the original cluster is retained, and the [tn] stage is also represented there and elsewhere: see e.g. SND s.v. *know*, n. *tnow(e)* (Per 1915). See also e.g. LAS, vol. III, 12.2 Dykends, Angus in the word KNOT and 12.5 Kirriemuir, Angus and 12.6 Forfar, Angus in the word KNIFE. The reduction to [n] was a process that spread gradually both geographically and across the lexicon. It is not evidenced in the LAEME corpus except for one token in one word: *neppe* for OE *cnæp* found in Cambridge, Trinity College B.14.39 hand A. One outcome found sporadically in Middle English (though not in the LAEME corpus) is [kn] > [gn]. See MED s.v. *knak*(*ke* n. *gnacke*, s.v. *knāpe* n. *gnapen-*, s.v. *knarri* adj. ?*gnarri*, and s.v. *knouen* v. *gnaw*).⁴⁰

The LAEME corpus does, however, contain evidence for two other possible outcomes.⁴¹ The first is [kn-] > [kw-]; the second is [kn] > [k]. The first may be supported by further material from MED: see MED s.v. *knāve* n. (1) 5. (a) *Joh. le Cuave*; s.v. *knē-holin* n. *kuenholin*; s.v. *knicche* n. (c) *kuychys*; s.v. *knitten* v. 4. (a) *kuyt*. Another such example from the LAEME corpus, *icuope* KNOWN is found in the Cotton Caligula A.ix version of *The Latemest Day*.⁴² It might be assumed that all these should be read with <n> rather than <u>. They could well be errors — misreadings and/or miswritings as <u> of two minim strokes intended as <n>. But The LAEME corpus has two further examples of a different kind. One is *soð cpapez* (< OE *soð gecnāwe*) HONEST, ADMITTING THE TRUTH from Oxford,

³⁸ For comparison, Holthausen has 82 *kl- roots and 71 *kr- roots.

³⁹ For developments in Scots see Johnston (1997: 501–502).

⁴⁰ Though it is possible that these spellings result from varieties with early collapse of /kn/, /gn/ in /n/. We owe this suggestion to Derek Britton.

⁴¹ Another recorded outcome is Scots Gaelic [kn] > [kr], as in *cnoc* [krok] HILL. We owe this observation to Michael Benskin.

⁴² Cf. also the form *ciuht/cuiht* in Language B of the Cotton Owl and the Nightingale cited in fn. 16 above.

Bodleian Library, Bodley 34, *Hali Meiðhad*,⁴³ fol. 61v. The other is *icpopeð* HE KNOWS in London, British Library, Egerton 613, *Poema Morale*, fol. 9r.⁴⁴ The use of <p>, wynn, rather than <u>, suggests the possibility that at least in these examples [kw] was indeed intended. If these forms do show vocalisation of the [n], the development appears restricted and short-lived.⁴⁵

From vocalisation, a natural further development — the next stage in a process of weakening — is deletion. The LAEME corpus has a few examples that suggest that this was also a sporadic possibility. The spelling *kaw* KNOW is found in two different manuscript versions of *Cursor Mundi*.⁴⁶ The form *keiel* KNEEL also occurs in the *Cursor Mundi*, Edinburgh MS fol. 2va. In *Havelok*, fol. 206va appears *kaue* KNAVE. In Lambeth Homilies KNOWN is *ikāpen* (fol. 26v, cf. fn. 13 above). This could just possibly have begun as *ikapen*, and been corrected not with an inserted letter ‘n’ but with its mark of abbreviation. From later Middle English, M.L. Samuels (*LALME* 4: 322 col. 3) lists six sources (from Essex, Somerset, Surrey, Sussex, Wilts (two) and Monmouth) that omit ‘n’ in KNOW, sometimes with later correction. The LAOS corpus supplies us with *kawn* KNOWN from a Berwickshire MS of 1442. The same text also contains *kenw* KNOW, which is difficult to interpret and may possibly represent mutual contamination of the words KEN and KNOW (Keith Williamson, personal communication).

⁴³ Edition: Millett 1982. The whole text is included in the LAEME corpus. The language belongs probably in S Salop: it is B of AB language. The reading here appears in MED s.v. *knoues* adj. & adv. as *sod cwawes*.

⁴⁴ So far there is no published edition of the relevant section of this version. The whole text is included in the LAEME corpus; the language belongs in S Worcs.

⁴⁵ We are grateful to Nils-Lennart Johannesson for drawing our attention to two further early Middle English examples of the word KNOW with initial cp- from the *Ormulum* (Oxford, Bodleian Library, Junius 1). In column 312 appears the infinitive *cpapenn* and in column 324 the preterite singular subjunctive *cpepe*. Johannesson (personal communication) writes: ‘What I find interesting about these forms is that Orm himself apparently never felt that they were inappropriate; at any rate, he never changed them in any way. What happened was instead that Jan van Vliet during his work on the lexicon of the *Ormulum* in the 1660s identified these forms as forms of ‘cnawenn’ and added a small ‘n’ above the deviant wynn in each case, using his characteristic greyish-green ink. It was this ‘n’ that then made its way into the White-Holt edition’.

⁴⁶ One is in London, British Library, Cotton Vespasian A.iii, hand A, fol. 2rb. This hand is a rather stiff Textura, which is very difficult to date: Wright (1960: 11) dates it ca. 1340. But Hands B and C of Cotton Vespasian A.iii are both cursive Anglicana, hand C with some secretary features. They are certainly no earlier than the late 14th century and probably from the early 15th. This implies that Scribe A, whose work on fol. 119rb follows straight on from that of Scribe C on fol. 119ra, was also working in the late 14th to early 15th century, though he may have belonged to an earlier generation. The second is in Edinburgh, Royal College of Physicians, MS (early 14th c.), hand A, fol. 7va. These two *kaw* forms occur at different places in the running text of *Cursor Mundi*. The languages of both *Cursor Mundi* texts belong probably in WRY.

The unusually wide range of possible developments surveyed in this paper may relate ultimately to the complex phonetic properties of [kn]. The following remarks in Minkova (2003: §7.5.3) are suggestive:

All voiceless velar initial clusters are separable. Their non-cohesiveness can be explained with reference both to their acoustic and their articulatory properties. One possible factor involved ... could be that the formant transitions of velars take longer than the transitions in alveolar or labial sounds ... This factor may enhance the chances of initial velars in onset clusters to be perceptually disassociated from the following segment. Also, the role of the second part of the /kn-/ cluster should be considered. All stable members of the stop + sonorant group have as their second element sonorants that have a clearer formant structure than nasals ... The differences between /kn-/ and other /k-/ initial clusters indicate that there are other forces at work, i.e. the articulatory effort of producing a sequence of two non-continuants.

So not only are words beginning with [kn] and ending with a high consonant extremely rare, the [kn] cluster itself has a number of uncommon properties. The lexical and phonetic idiosyncracies of these [kn-] initial words enable us to demonstrate that the observed figural representations in <cin-/kin-> are not, after all, at odds with a rational litteral and phonetic interpretation.

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